



UNITED STATES PATENT AND TRADEMARK OFFICE

W
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,957	08/07/2003	Shiroshi Kanemitsu	S003-5081	1218
7590	05/05/2005		EXAMINER [REDACTED]	ALSOMIRI, ISAM A
ADAMS & WILKS 31st Floor 50 Broadway New York, NY 10004			ART UNIT [REDACTED]	PAPER NUMBER 3662

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/635,957	KANEMITSU ET AL.	
	Examiner Isam Alsomiri	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 February 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4, 6-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 12-20 is/are allowed.
- 6) Claim(s) 1-4 and 6-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 August 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 6 and 8 are rejected under 35 U.S.C. 102(b) as being

anticipated by U.S. Patent No. 5,760,896 to Suzuki. Suzuki teaches an angle detecting apparatus comprising: one or more line-type passive range-finding devices for performing a range-finding operation (see column 1, lines 11-12 and figure 22), each line-type passive range-finding device having a pair of Lenses spaced apart from each other by a baseline length (see column 14, Lines 20-22), a line sensor disposed behind the lenses so that a pair of images of an object are focused by the respective lenses onto the line sensor (see column 14, lines 5-8., additionally, the sensors are arranged perpendicularly - see figure 22), and an operating section for performing the range-finding operation in a plurality of mutually different directions on the basis of an output of the line sensor; and an inclination-angle computing section for computing an inclination angle of the object relative to a direction of the baseline length on the basis of an output of the line-type passive range-finding device (see column 2 lines 39-49, and col. 14 lines 33-38).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Suzuki. It is very well known in the art to calculate the distance to an object, when using a rangefinder, to calculate the distance from the Lens of the rangefinder to the object. While Suzuki is silent on this, it is possible to say that Suzuki is inherently using the Lenses for the point from which measurements are made in each of the different directions because the Lenses are positioned at the outside of the housing of the rangefinder. If not inherent, the calculation of the distance from the lenses to the object in each of the different directions would have been obvious.

Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of U.S. Patent No. 5,870,178 to Egawa.

Suzuki does not teach the projection of any light for the passive distance measurement. Egawa, however, teaches the projection of an image onto an object (could be any object - a screen, wall, etc.) so that the object may be measured passively (see abstract). It would have been obvious for Suzuki to project an image onto a target to be measured passively as taught by Egawa as a means for further illuminating the object to which the distance is to be measured.

Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of U.S. Patent No. 5,196,900 to Petterson. Suzuki does not teach the calculation of the baseline length and distance using the center of gravity technique. However, Petterson teaches the use of the center of gravity technique for determining the distance to an object in a passive rangefinder (see column 6, Lines 3-8). It would have been obvious to implement the use of the center of gravity technique taught by Petterson in the passive rangefinder taught by Suzuki as a means for improving accuracy of measurements.

Allowable Subject Matter

Claims 12-20 allowed.

Response to Arguments

Applicant's arguments filed February 4, 2005 have been fully considered but they are not persuasive. Regarding claim 1, applicant argues "Suzuki does not include an angle detecting apparatus for determining an inclination angle of a screen, and Suzuki does not disclose an inclination-angle computing section for computing an inclination angle of the screen relative to the direction of the baseline length on the basis of an output of a passive range-finding device, as recited in independent claims 1 and 12". However, Suzuki does teach the claimed determination, although Suzuki does not mention the inclination object is a screen, the object can be a screen (or the like).

Suzuki teaches "the angles of the contrast portions in the vertical and horizontal directions of a photographic subject can be detected with respect to photoelectric conversion element arrays. Therefore, distance can be measured with a high degree of accuracy by selecting and using a contrast portions which has a smaller angle" which reads on the claimed angle of the screen (object) relative to the direction of the baseline length (element arrays). Therefore, the rejections are maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3662

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam Alsomiri whose telephone number is 571-272-6970. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isam Alsomiri



May 2, 2005



THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600